

I claim:

WE CLAIM AS OUR INVENTION:

1. A pinless composite masonry block comprising a front surface, a back surface, first and second sides, and a top surface and a bottom surface, said block comprising one or more protrusions positioned on said block top surface said protrusion comprising a side surface, wherein said protrusion side surface has an angle of at least about 20° from vertical, said protrusion positioned on said block top or bottom surface so as to mate with an opening of and adjacent by positioned block.
2. The block of claim 1 wherein each of said block sides have an inset spanning from said block top surface to said block bottom surface and wherein a portion of said block top surface comprises a protrusion which spans between said insets.
3. The block of claim 2 wherein said protrusion side surface has an angle ranging from about 19° to 21° from vertical.
4. The block of claim 1 wherein said block front surface is substantially planar.
5. The block of claim 1 wherein said block front surface is faceted.
6. The block of claim 1 wherein said block front surface is outwardly curving.

7. The block of claim 2 wherein said protrusion extends along said block top surface between said first and second inset.

8. The block of claim 1 wherein said block protrusion comprises first and second oblong sections between which is positioned a joining section, said joining section having a narrower width than either of said first and second oblong sections.

9. The block of claim 1 wherein said block has an open central portion extending from said top surface to said bottom surface.

10. The block of claim 1 wherein said block comprises two protrusions.

11. The block of claim 10 wherein said protrusions are positioned on said block top surface adjacent said first and second inset.

12. A pinless composite masonry block comprising a front surface and a back surface, a top surface and bottom surface, and first and second sides, said first side having a first inset wherein said first inset spans from said block top surface to said block bottom surface, said second side having a second inset, wherein said second inset spans from said block top surface to said block bottom surface, a protrusion on one of said block top or bottom surfaces, said protrusion comprising a side surface, said side surface has an angle of at least about 20° from vertical,

and, first and second anchoring legs, said first leg extending from said block first side and said second leg extending from said block second side.

13. The block of claim 12 wherein said block front surface is substantially planar.

14. The block of claim 12 wherein said block front surface is faceted.

15. The block of claim 12 wherein said block front surface is outwardly curving.

16. The block of claim 12 wherein said block protrusion side surface has an angle ranging from about 19° to 21° from vertical.

17. The block of claim 12 wherein said block has an open central portion extending from said top surface to said bottom surface.

18. The block of claim 12 wherein said block comprises two protrusions.

19. The block of claim 18 wherein said protrusions are positioned on said block top surface adjacent said first and second inset.

20. A retaining wall structure, said retaining wall structure comprising one or more courses, each of said courses comprising one or more pinless composite masonry blocks, each of said blocks comprising a front surface and a back surface, a top surface and bottom surface, and first and second sides, said first side having a first inset

wherein said first inset extends from said block top surface to said block bottom surface, said second side having a second inset, wherein said second inset extends from said block top surface to said block bottom surface, a protrusion on one of said block top or bottom surfaces, said protrusion comprising a side surface, said side surface has an angle of at least about 20° from vertical, wherein said block protrusion is configured to mate with the inset of one or more adjacently positioned block.

21. The structure of claim 20 wherein at least one of said blocks comprises first and second legs, said first leg extending from said block first side surface and said second leg extending from said block second side surface.

22. The retaining structure of claim 20 wherein said structure comprises at least an upper and an adjacent lower course wherein the blocks at least one of said upper course or said lower course comprise insets which are seated on the protrusions of the blocks of said adjacent course.

23. The structure of claim 22 wherein said retaining structure comprises a supporting matrix positioned between adjacent blocks of said upper and lower courses.

24. The structure of claim 23 wherein said supporting matrix comprises tie backs positioned between the blocks of said upper and lower courses.

25. The structure of claim 23 wherein said supporting matrix comprises a continuous webbing positioned between the blocks of said upper and lower courses.

26. A structure comprising the block of claim 1.

27. A structure comprising the block of claim 20.

add B1
add C1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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